The National Heart, Lung, and Blood Institute (NHLBI) is committed to its public health mission of deepening understanding of the pathobiology of cardiovascular (CV), lung, and blood disorders and translating this knowledge into improved care and clinical outcomes for patients and improved public health. The Institute’s blueprint for guiding, stimulating, and supporting outstanding science in furtherance of this mission is articulated in its Strategic Plan, *Shaping the Future of Research* ([http://apps.nhlbi.nih.gov/strategicplan/](http://apps.nhlbi.nih.gov/strategicplan/)). In the coming months, we plan to share with the *JACC* readership the NHLBI’s strategic vision in CV disease and its prevention, provide details of current and developing programs designed to fulfill this vision, and discuss opportunities and challenges that are expected to influence CV research in the years ahead. In making programmatic decisions, we at the NHLBI rely tremendously on discussions with the scientific, clinical, and public health communities, and these communications with *JACC* readers will be designed to further stimulate such discourse.

The NHLBI Strategic Plan highlights the need for 2 stages of translation—moving basic knowledge into clinical evidence and moving clinical evidence into clinical practice and public policy. Our long history of innovation in facilitating the first of these critical translational steps is exemplified by our support of specialized centers of clinically oriented research in a number of carefully defined topic areas. The achievements of these centers have been significant; nonetheless, we continue to seek new, even more productive approaches to facilitate basic-to-clinical translation. Efforts toward the second translation step are being spearheaded by our Division for the Application of Research Discoveries, which is on the threshold of launching integrated evidence-based CV risk reduction guidelines for children and adults and implementing programs to address the growing problems of childhood obesity and health disparities.

We are privileged to be leading NHLBI efforts during a period of unprecedented technologic advances that promise to facilitate extraordinary progress in CV diagnosis, treatment, and prevention. In recent years, the NHLBI has funded programs to accelerate development and application of enabling technologies such as genomics, proteomics, tissue engineering, nanotechnology, and informatics. These programs will drive development of powerful new diagnostic tools, advanced therapeutic approaches such as cell- and contract-supported programs (e.g., centers, large-scale clinical trials, and epidemiologic studies) and research training. During lean times as are occurring today, the NHLBI places the highest emphasis on preserving investigator-initiated research and nurturing trainees and early-stage investigators, so as to avoid gaps in the “pipeline” of researchers that could jeopardize CV research efforts for decades to come.

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gene-based treatments, and far more personalized approaches to CV prevention and therapeutics. Large-scale clinical trials funded by the NHLBI during the past several decades have contributed enormously to the hard evidence available to guide clinicians in the prevention and treatment of ischemic heart disease, heart failure, and sudden cardiac death. Evidence-based contributions to managing risk factors such as hyperlipidemia, hypertension, and diabetes mellitus have played a key role in the decline in U.S. CV mortality rates. NHLBI-supported clinical research efforts will continue to be directed toward exploring both efficacy of new treatments and effectiveness of already available treatment strategies. Many of the insights behind rigorous intervention trials come from observations made in our landmark longitudinal cohort studies. These programs, exemplified by the 60-year old Framingham Heart Study, have entered a new era of broadly exploring genotype–phenotype associations that will radically expand our understanding of individual clinical risk and the underlying genetic basis of CV diseases. Importantly, the primary information derived from these programs is now being openly shared with the scientific community as a challenge to all investigators to help translate these efforts into scientific and clinical gain. We are transforming ourselves into a laboratory for exploring clinical investigational methodologies; the insights that emerge can be expected to rapidly and efficiently inform future evidence-based medical practice. On a final note, let us mention the Institute’s growing involvement in the worldwide epidemic of CV disease. Cardiovascular disease accounts for 30% of global deaths, 65% of which occur in the developing world. The reality that 80% of premature CV deaths are preventable constitutes an urgent call to action. Our recently announced program in global CV health will help drive a far-reaching CV disease prevention effort and, at the same time, advance our sophistication in preventive strategies that can then be reapplied in our own nation of disparate health care delivery and outcomes.

In a series of articles to appear in JACC, we will expand our discussion of many of these areas and programs. We are confident that these communications will not only inform the clinical community about the NHLBI’s activities, but also enrich the dialogue needed to help us better serve our mission of advancing the CV health of our nation and our world.

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